Recorded water levels in this bulletin are derived from a representative network of water level gages on each lake (see cover <u>map</u>). Providers of these data are the National Ocean Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, and the Marine Environmental Data Service, Department of Fisheries and Oceans, Canada. The Detroit District, Corps of Engineers and Environment Canada derive historic and projected lake levels under the auspices of the Coordinating Committee on Great Lakes Basic Hydraulic and Hydrologic Data.

This bulletin is produced monthly as a public service. Tables of possible storm-induced rises at key locations on the Great Lakes are available on request. The Corps also publishes the "Great Lakes, Connecting Channels and St. Lawrence River Water Levels and Depths," weekly, which provides a forecast of depths in the connecting rivers between the Great Lakes and the International Section of the St. Lawrence River. These publications can be obtained free of charge by writing to the address shown on the front cover, or by calling (313) 226-6441. Notices of change of address should include the name of the publication(s). The Internet address <a href="http://www.lre.usace.army.mil/glhh">http://www.lre.usace.army.mil/glhh</a> also contains this information.

## Great Lakes Basin Hydrology April 2011

Overall, the Great Lakes basin experienced above average precipitation during the month of April. Lakes Superior, Michigan-Huron, Erie, and Ontario received 180%, 209%, 184%, and 186% of average precipitation, respectively. During the past 12 months, precipitation has been near average for Lake Superior and above average for all of the other Great Lakes. Outflows from Lakes Superior and Michigan-Huron were below average in April while the outflows from Lakes Erie and Ontario were near average. The tables below list April precipitation, water supply, and outflow information for the entire Great Lakes basin.

The above average precipitation last month caused all of the Great Lakes water levels to rise quicker than average in April. Comparison of April monthly mean water levels to long-term average shows Lakes Superior, Michigan-Huron, and St. Clair were 14, 19, and 6 inches below average, respectively, while Lakes Erie and Ontario were both 1 inch below average.

PRECIPITATION (INCHES)										
BASIN	April				12-Month Comparison					
	2011	Average (1900-2008)	Diff.	% of Average	Average Last 12 months	Average (1900-2008)	Diff.	% of Average		
Superior	3.62	2.01	1.61	180	31.74	30.51	1.23	104		
Michigan-Huron	5.43	2.60	2.83	209	36.12	32.44	3.68	111		
Erie	5.80	3.16	2.64	184	42.53	35.40	7.13	120		
Ontario	5.41	2.91	2.50	186	41.25	35.71	5.54	116		
Great Lakes	4.99	2.54	2.45	196	36.00	32.64	3.36	110		

	April WATER SUPPLIES <sup>1</sup> (cfs)		April OUTFLOW² (cfs)			
Lake	2011	Average <sup>4</sup> (1900-2008)	2011	Average <sup>3</sup> (1900-2008)		
Superior	160,000	150,000	52,000	68,000		
Michigan-Huron	433,000	284,000	166,000	182,000		
Erie	128,000	67,000	209,000	207,000		
Ontario	125,000	93,000	259,000	251,000		

Notes: Values (excluding averages) are based on preliminary computations. CFS denotes cubic feet per second.

<sup>&</sup>lt;sup>1</sup> Negative water supply denotes evaporation from lake exceeded runoff from local basin.

<sup>&</sup>lt;sup>2</sup> Does not include diversions.

<sup>&</sup>lt;sup>3</sup> St Lawrence River average outflow is based on period of record 1900-2005

<sup>&</sup>lt;sup>4</sup> Lake Ontario average water supply based on 1900-1989